

Each generation has its own rendezvous with the land, for despite our fee titles and claims of ownership, we are all brief tenants on this planet. By choice, or by default, we will carve out a land legacy for our heirs. We can misuse the land and diminish the usefulness of resources, or we can create a world in which physical affluence and affluence of the spirit go hand in hand.

STEWART L. UDALL  
*Secretary of the Interior*

NH STATE  
PLANNING  
PROJECT

# LAND WATER RECREATION

REPORT NO. 11  
LAND SURVEYING  
in NEW HAMPSHIRE



Project Director	Mary Louise Hancock
Author & Compiler	E. N. Roberts
Editorial Assistance	Frances Shaine
Design	Alice Cosgrove Alec Nicholas

Preparation of this report was financially aided through a federal grant from the Urban Renewal Administration of the Housing and Home Finance Agency, under the Urban Planning Assistance Program authorized by Section 701 of the Housing Act of 1954, as amended.

Reprinted by New Hampshire Land Surveyors Association with permission from the Office of Comprehensive Planning.

## LAND SURVEYING IN NEW HAMPSHIRE

Besides the many points that are brought to light, it is a study to pleasure, and almost each wholeness and innocent curiosity, that we seldom find a man that has once entered himself into the study of Geometry or Geodesy, can ever after wholly lay it aside.

Concord, 1791, by John Lowe

### STATE OF NEW HAMPSHIRE STATE PLANNING PROJECT

JOHN W. KING  
GOVERNOR

MARY LOUISE HANCOCK  
PROJECT DIRECTOR

To the layman, surveying is a highly technical and rather obscure profession, and a surveyor is a man with a tripod-legged instrument who obstructs traffic occasionally by putting a tape across a highway. While both of the above definitions have within them something of the truth, they fail to note the excitement of historical discovery which may well underlie the surveying of the boundary of a home lot or a right-of-way for a new highway.

Much of the history of New Hampshire is inextricably bound up with the border lines of the towns and counties. An understanding of this influence is a prerequisite to our understanding of how some of today's land use patterns evolved.

For the land is rooted in history, and many a reference in a deed may be deciphered only by knowledge of things gone by. Perhaps a deed may read "to the northwest corner of the passenger depot platform as it was in 1860," but the platform was removed in 1861. Or the phrase "beginning at a point near Howell's Bridge" might refer to the present structure, the bridge that washed out in 1858, or the entire district which is now called West Hopkinton.

The following report, donated to the State Planning Project by the author, is based on the findings of many years. It delineates the possibilities historically founded, which cannot but be a contribution to the knowledge of New Hampshire more fully complete and more accurate than any other. It is a study of the history of surveying and places its origin with roots in history.

Concord, New Hampshire — November, 1965

To E. N. Roberts, the author, we are deeply grateful.



# CONTENTS

## LAND SURVEYING IN NEW HAMPSHIRE



Besides the many profits this art brings to man, it is a study so pleasant, and affords such wholesome and innocent exercise, that we seldom find a man that has once entered himself into the study of Geodesy or Geodæsia, can ever after wholly lay it aside:

*Geodesia, 1793, by John Lowe*

To the layman, surveying is a highly technical and rather obscure profession, and a surveyor is a man with a tripod-legged instrument who obstructs traffic occasionally by putting a tape across a highway. While both of the above definitions have within them something of the truth, they fail to note the excitement of historical discovery which may well underlie the surveying of the boundary of a home lot or a right-of-way for a new highway.

Much of the history of New Hampshire is inextricably bound up with the border lines of the towns and counties; an understanding of this influence is a prerequisite to our understanding of how some of today's land use patterns evolved.

For the land is rooted in history, and many a reference in a deed may be deciphered only by knowledge of things gone by. Perhaps a deed may read "to the northwest corner of the passenger depot platform as it was in 1860," but the platform was removed in 1863. Or the phrase "beginning at a point near Rowell's Bridge" might refer to the present structure, the bridge that washed out in 1852, or the entire district which is now called West Hopkinton.

The following report, donated to the State Planning Project by the author, is based on the findings of many years. It delineates the guidelines, historically founded, which cannot but aid surveyors to make the land records of New Hampshire more nearly complete and more accurate. For each of us, it begins to illuminate the obscure reaches of surveying and piques the imagination with hints of history.

To E. N. Roberts, the author, we are deeply grateful.



LAND SURVEYING  
IN NEW HAMPSHIRE

Bolton the many profits this art brings to man. It is a study in practical and efficient work. And innocent curiosity that we learn that a map that has once entered his mind into the study of Geography or Geodesy, can ever after wholly lay it aside.

Geodesy, 1777, by John Lane



To the surveyor, a highly technical and rather obscure profession, and a surveyor is a man with a tripod-mounted instrument who operates a transit occasionally by pulling a tape across a highway. While both of the above definitions have within them something of the truth, they fail to note the excitement of historical discovery which may well underlie the surveying of the boundary of a new lot or a right-of-way for a new highway.

Much of the history of New Hampshire is inextricably bound up with the border lines of the towns and counties; an understanding of this inheritance is a prerequisite to our understanding of how some of today's land use patterns evolved.

For the land is rooted in history, and many a reference in a deed may be lost—phased only by knowledge of things gone by. Perhaps a deed may read "to the northwest corner of the passenger depot platform as it was in 1860," but the platform was removed in 1887. Or the grantor designated as a point near Rowell's Bridge, might refer to the present structure, the bridge that washed out in 1932, or the entire structure which is now called West Hopkinton.

The following report, donated to the State Planning Project by the author, is based on the findings of many years. It delineates the guidelines, historically founded, which cannot but aid surveyors to make the land records of New Hampshire more nearly complete and more accurate. Not each of us, it begins to illustrate the nature of surveying and gives the imagination with hints of history.

To E. H. Roberts, the author, we are deeply grateful.

CONTENTS

	Page
I. Title . . . . .	1
II. Purpose . . . . .	1
III. Public Land . . . . .	1
A. State . . . . .	1
B. County . . . . .	1
C. Town . . . . .	2
D. Precinct . . . . .	4
IV. Designated Use Land . . . . .	5
A. Special Privilege . . . . .	5
B. Special Reservations . . . . .	5
C. Rights-of-Way Completely Owned . . . . .	5
D. Easements . . . . .	6
E. Abandonment of Rights-of-Way and Easements . . . . .	7
F. Bodies of Water . . . . .	8
G. Special Limitations . . . . .	11
V. Private Land . . . . .	11
A. Source of Controlling Data . . . . .	11
B. Private Bounds Set as Property Marks . . . . .	11
C. Adverse Possession . . . . .	14
D. Surveying Methods . . . . .	15
VI. Control . . . . .	20
A. Horizontal . . . . .	20
B. Vertical . . . . .	21
C. Triangulation Marks . . . . .	21
VII. General Notes . . . . .	21
VIII. Definitions of Local Expressions . . . . .	23
IX. Observations . . . . .	24-25-26
X. Appendix . . . . .	27



# CONTENTS

Page

I.	Title	1
II.	Purpose	1
III.	Public Land	1
	A. State	1
	B. County	1
	C. Town	1
	D. Precinct	1
IV.	Designated Use Land	5
	A. Special Privileges	5
	B. Special Reservations	5
	C. Rights-of-Way Completely Owned	5
	D. Easements	5
	E. Abandonment of Rights-of-Way and Easements	5
	F. Bodies of Water	5
	G. Special Limitations	11
V.	Private Land	11
	A. Source of Controlling Data	11
	B. Private Boundaries as Property Marks	11
	C. Adverse Possession	14
	D. Surveying Methods	15
VI.	Control	20
	A. Horizontal	20
	B. Vertical	21
	C. Triangulation Marks	21
VII.	General Notes	21
VIII.	Definitions of Local Expressions	23
IX.	Observations	24-25-26
X.	Appendix	27

**I. TITLE** Land Surveying in New Hampshire

**II. PURPOSE** To record past and present land surveying information that will help present and future land surveyors in their efforts to improve the land records within the State.

## **III. PUBLIC LAND**

### **A. State**

- 1620 - Included in a grant to Plymouth Company from James I. King of England
- 1622 - John Mason granted land by Plymouth Company
- 1629 - First called New Hampshire in a grant to Mason from the Plymouth Company
- 1641 - N.H. Settlements under Massachusetts Bay Government
- 1679 - Royal Province of New Hampshire
- 1775 - Provincial Congress = transitional government
- 1784 - The State of New Hampshire

State boundaries as they now exist were established:

- 1901 - Massachusetts line
- 1929 - Maine line re-run, bronze markers set
- 1934 - Vermont line = west bank low water of Connecticut River. A.L. 56
- 1842 - Canadian line

**B.** County lines have changed many times. Entire towns and parts of towns have been in different counties for different periods of their existence, consequently their land records will be at the applicable County Registries.

Major changes in County history:

- 1641 - Norfolk County Massachusetts = Hampton and Exeter
- 1643 - Piscataqua County Mass. = Dover and Portsmouth
- 1733 - Essex County Massachusetts = Concord

	No. Counties Entire State
1771 - Rockingham, Hillsborough, Cheshire	3
1773 - Strafford & Grafton out of Rockingham	5
1805 - Coos out of Grafton	6
1823 - Merrimack parts of Hillsboro & Rockingham	7
1827 - Sullivan out of Cheshire	8
1840 - Belknap out of Strafford	9
1840 - Carroll from parts of Strafford and Coos	10

For Directory of County Registries see Appendix.



### III. Public Land (continued)

A County Map History should be made.

#### C. Town

1. Original grants to private companies known as Proprietors required that the members prove up their Home and Farm lots by cash payments, settlement with houses and tillage, retention of a clergyman and similar conditions to be accomplished within a stated number of years.
  - a. The word "lot" frequently meant that a proprietor was assigned his location in the township by drawing his lot number in a lottery.
  - b. The original divisions and their lots were usually in accordance with the Proprietors' Plan for the subdivision of the Township. Range lines ran generally north and south and lot lines east and west. Some towns reverse this rule.
  - c. The original sale and allocation of the lots did not account for all the land in the Township.
  - d. The remainder was owned by the Proprietor's Company.
  - e. Subsequent "Divisions" did not always mean the sale of a group of contiguous lots. It could mean the sale at one meeting of all the lots having purchasers at that time. Consequently the lot numbers for that "Division" will be consecutive but the lots may be in several parts of town.
  - f. Town governments were formed by and for the inhabitants and land owners in a township. The proprietors' company could still own tracts of land at the time of the town government's organization so that it is possible to have Proprietors' Divisions dated after the Town government's formation.
  - g. Copies of the original Proprietors' Plans are available for some of the Townships. The N.H. Historical Society catalogues the location and the availability of these plans wherever they may be.

### III. Public Land (continued)

- h. Proprietors' record books with land sale descriptions are more apt to be available than the Proprietors' Plans.
2. Current textbooks still say "boundary lines in the colonies consisted of natural features...tracts irregular in shape...no general system as control." This is not true for New Hampshire. A paper could be written showing the development of land division methods from the Masonian curves swung from Portsmouth to the six miles square towns in "a line of towns." The 100 acre lots in the towns were parallelograms and rectangles. These divisions of provincial lands were made, surveyed and bounded long before and probably helped contribute to the idea of the six miles square townships of Jefferson's Public Land Act of 1785.
3. In 1806 all the towns then in the State had to file town plans with the Secretary of State. They are bound and available for reference at the Secretary of State's office in Concord, N.H. They were the source material used in the preparation of the 1816 Philip Carrigain map of the State.
  - a. All of them show Town Boundary courses and distances for 1803 - 1806.
  - b. The additional detail varies but may show:
    - (1) Turnpikes
    - (2) Villages, churches, schools, hills
    - (3) Complete copy or original of the Proprietors' Plan lots
  - c. An index of the maps and the material shown should be made.
4. Town lines are perambulated every seven years by the selectmen and the notes recorded in general or special books on file with the Town or preserved for the Town at the N.H. Historical Society.
5. Town lines have been revised through the years. Details are in Town and State records. A convenient index is in "Population of New Hampshire part one" as published by the N.H. State Planning & Development Commission in 1946 and reproduced in the Appendix of this report.



### III. Public Lands (continued)

6. In the 1930's an index was compiled of all known Town records and it is on file at the History Department Library, UNH, Durham, N.H.

7. Many of the Towns and Cities have Assessors' Maps showing all of the lots for tax purposes.

They can only be used as a general indication of lot location and shape. When a lot survey is completed the owner should file a copy of the map with the municipality so that the assessors' map can be corrected.

8. Several State and Federal agencies have detailed aerial maps which will help locate land use lines for the identification of vaguely described lots.

9. Municipal maps and records will frequently give the municipal distances for a block and consequently the total for the individual lots making up that block.

10. The word "Town" is used for township in many records, but:

- a. "Town" is the town government, and
- b. "Township" is the geographical area.

D. Precincts or Village Districts are established by geographically related groups of legal voters who want to tax themselves for the establishment and use of special benefits not desired by all the voters in a Township.

1. These benefits may be fire protection, water and sewer systems, planting of shade trees or similar items.

2. The precinct boundary lines are voted by the precinct government and recorded in the Town records. They may be revised and re-recorded by the Precinct as necessary.

3. A precinct may be only part of a township or it may include all or parts of one or more townships.

### IV. DESIGNATED USE LAND

A. Special privilege such as a "mill privilege." Sawmills and gristmills were vital to initial land sales. Proprietors enticed millers, frequently with a gift of land but almost always with a gift of a "mill privilege" which was a right to use the stream flow at a given place, a guarantee that other upstream use would not shut off that flow and a limitation on the amount of interference to downstream flow.

A "mill privilege" may be conveyed with the land or it may be separate and in effect a restriction on the use of stream banks, mill site, dams and flow of water by the land owner. The amount of land that may be used in exercising the privilege is seldom mentioned.

The mill development had to be built within a specified time or the privilege lapsed. Once operating there was no requirement that continuation was essential. Consequently mill privileges are still being deeded for sites having no mills or dams.

B. Special Reservations were frequently made:

1. Provincial Governors retained parts of some grants.

2. Church, school and cemetery lots and rangeway roads were reserved by the Proprietors for those uses.

3. Ministers' Lots were given to the minister when one could be persuaded to settle in the Township.

4. Ponds over 10 acres, islands, and hilltops were kept in public ownership.

C. Rights-of-Way completely owned

1. Highways

a. State Highway Right-of-Way Department's records. The Right-of-Way line may occur in the highway cut or fill slope. The State's deeds frequently permit top or toe after construction to be on the grantor's abutting land. When writing description for a tract so affected include "subject to easement to State of New Hampshire for road slopes." (If State did acquire the Right-of-Way and rights in slopes.)



#### IV. Designated Use Land (continued)

- b. City Engineer and City Clerk records. Seldom at Registry. Statute reference for taking Right-of-Way = RSA:230:3.
- c. Town records, may be separate highway books in addition to Selectmen and Town Meeting records.
- d. Colonial widths sometimes indicated intended use;  
4-Rod = connecting major centers across state  
3-Rod = connecting towns  
2-Rod = connecting town and village  
1-Rod = side roads
- e. Priority for establishment of Right-of-Way lines:
  - (1) As bounded
  - (2) As indicated by highway face of stonewalls
  - (3) Recorded width centered on Traveled Way
  - (4) State or municipal opinion in absence of any information.

#### 2. Utilities:

- a. Deeds and construction plans showing location are recorded at the Registry.
- b. Utilities' engineering departments both public and municipal will have location drawings. Note that in New Hampshire a private utility is called a public utility.

- 3. Railroads own their Rights-of-Way; their central office engineering departments will furnish prints of location plans. In 1914 the ICC required complete detailed property acquisition plans from all railroads. Copies are in the N.H. Secretary of State's office and the State Highway Right-of-Way Division.

- 4. Survey and describe to the Right-of-Way lines, current work never includes the Right-of-Way area, sometimes the old deeds did include it. Get your client's permission and file a print of your survey map with the owner of the abutting Right-of-Way asking him to accept the lines you have shown for his Right-of-Way. His letter of acceptance will protect you and your client in the future.

- D. Easements = rights to use but not own with limitations on both sides of the agreement.

#### IV. Designated Use Land (continued)

- 1. Common Passway roads = in unbarred use for more than twenty years the public gains an unrecorded right to use.
- 2. Private Passway roads = recorded and unrecorded rights to pass and re-pass granted to specified persons, usually abutting and interior tract owners and their agents, no public rights.
- 3. Utilities on, above and below ground; usually recorded in deeds and on recorded plans with specified widths and limitations permitting construction and maintenance. Occasionally unrecorded acquisition by more than twenty year use.
- 4. Railways have a lease or easement but do not own.
- 5. Flowage rights easements usually recorded occasionally acquired by more than twenty year use.
- 6. Property survey locates all easements but map and description courses, distances and area include the easements with an explanatory paragraph giving the limitations imposed.
- 7. Many wooded N. H. properties once supported homes and farms which had their own private grave yards. These grave yards may or may not be excepted in the recorded deeds. Watch for them in the field and except them in the description.

#### E. Abandonment of Rights-of-Way and easements.

- 1. Highways in State, County, City and Town records

- a. Roads abandoned subject to gates and bars are no longer maintained by, but are still owned by, the governmental agency.

- b. Roads fully abandoned revert to:

- (1) The original owners' lines when known
- (2) The abutting owners' from the centerline of the Right-of-Way when original taking not known
- (3) When a governmental division wants to abandon a Right-of-Way which it never accepted in formal dedication to public



#### IV. Designated Use Land (continued)

- (3) use then the same vote will first accept the Right-of-Way and then abandon it.

2. Railroad and utility Rights-of-Way are sold when the use is abandoned.
3. Railroad Rights-of-Way that are easements granted by Railroad Commissioners' Awards revert to the heirs of the owners from whom the Commissioners took the easement.
4. Easements revert to the land owners at the time of abandonment.
5. Rights-of-Way shown on recorded subdivision plats but not dedicated to public use in 20 years revert to the abutters. N.H. 1955:238:7 RSA \_\_\_\_\_.
6. Work with the abutters' lawyers and the beneficiaries to establish the property lines in the abandoned rights.

#### F. Bodies of Water

##### 1. Lakes and Ponds

##### a. Fresh water area less than ten acres

- (1) Privately or municipally owned
- (2) Property lines include or divide the pond

##### b. Fresh water area 10-20 acres, State has rights.

##### c. Fresh water area <sup>10</sup>20 acres or more

- (1) Public owns as a Great Pond
- (2) Public property line may be set

- (a) By legislative act such as Winnepesaukee USGS elev. 504.15
- (b) By N.H. Water Resources Board recommendation

- 1/ Squam Lake USGS elev. 562.50
- 2/ Highland Lake Andover 640.71=crest of spillway. Normal 4' flashboards place property line under 4' of water and private beaches are on private property.

#### IV. Designated Use Land (continued)

- 3/ When setting private property line at public water line the N.H. Water Resources Board should be consulted.

- (c) For preliminary reconnaissance a general rule for legal water line is

- 1/ Man-made pondage = low water line = crest of Spillway
- 2/ God-made pondage = normal high water which will vary depending on available local recollection.

- (3) Public's water line contour along the banks of Great Pond tributaries is normally not taken to full closure up the tributary.

- (4) Man-made changes in Public's legal water line - by fill can only be made by state permit, apply through the N.H. Water Resources Board; by cut increases Public water area and does not require a permit.

- (5) Changes due to erosion and accretion should be noted by the surveyor for the lawyer's use but ownership of the land affected by these changes in waterline requires legal decision.

- (6) Docks and structures should not interfere with navigation access to other property.

2. Tide Water legal lines. Low water mark at ordinary low tides if ebb not more than 1,650 feet horizontally.

3. Rivers, low water mark.

4. Brooks

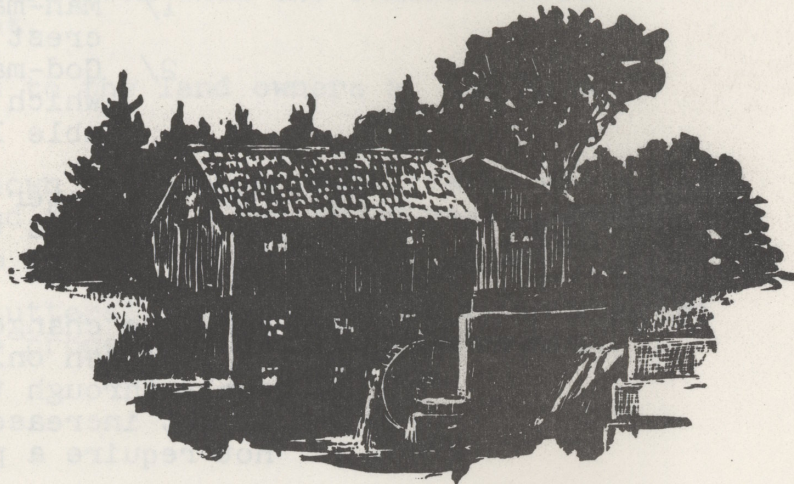
- a. Property descriptions may read to one bank or to the thread (center of the low water channel). When only name of brook or "a brook" is given thread is assumed.

- b. Brooks change their courses frequently and legally continue to be the property line with loss and gain to the abutters with each change.



#### IV. Designated Use Land (continued)

- c. One way to stop this controversial loss and gain is to offset bound and describe to the course of the brook on the date of your survey. Then have the abutting owners record a lawyer executed boundary line agreement for the detailed description of the course of the brook. Future changes in the brook's course will not affect the recorded property line.



- d. Deeds still copying an old Mill Pond flow line at the elevation of the dam spillway or flashboards, although there is no longer any trace of the dam, its flashboards or the old flow line, should be worked out with the abutters and their lawyers to arrive at an agreed line and clear the ambiguity from the record.

5. Recreational land values in the State are increasing to the point where the land owners want a legal property line at the water, not the water line today which will be different tomorrow.

This legal line will not change existing flowage easements.

From a private land value viewpoint the line could be established by the legislature as a contour on the bed of a body of water one foot vertically below a summer water elevation. This would guarantee the private ownership of the beach.

Each body of water could then have the elevation of this contour established to the USC & GS datum and it would be a more definite line.

#### IV. Designated Use Land (continued)

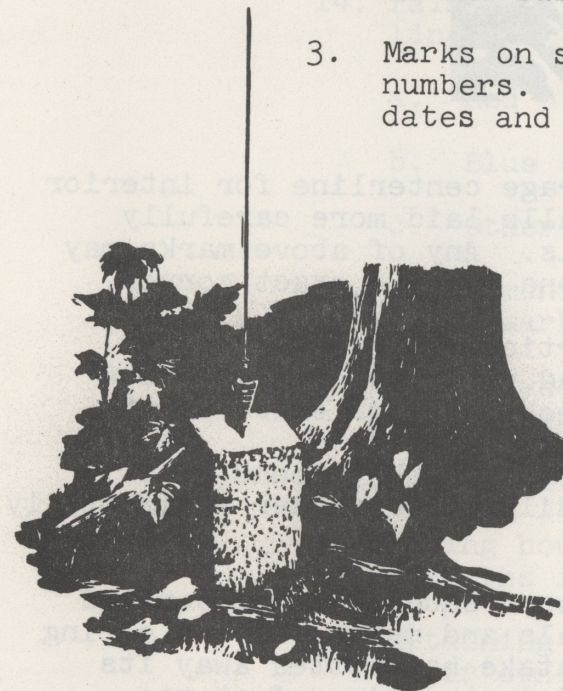
- G. Land is frequently deeded today with special limitations on its use, either by deed covenants or by planning and zoning ordinances.

#### V. PRIVATE LAND

- A. Sources of controlling data are above in the previous section.

- B. Private bounds set as property marks:

1. Old Colonial stones, frequently natural stone of distinctive shape and appearance compared to nearby stones, i.e...long or pointed stone obviously set on end.
2. Marks in stones = drill hole, iron pin, pipe or RR spike driven into the stone, either a separate stone or the base stone of a stonewall.
3. Marks on stones = chiselled cross, shield, letters, numbers. Town line stones painted with perambulation dates and initial of each town on applicable side.



4. Granite bounds with or without marks.

- a. Old (100 yrs.) usually 8" x 8" to 12" x 12".
- b. More recent usually 6" x 6" to 4" x 4".
- c. Granite bounds recommended as best permanent corners



## V. Private Land (continued)

5. Concrete bounds with drill holes or metal plugs have limited life related to the quality of the concrete and the site conditions.
6. Marble bounds from Vermont quarries will be found in the western part of the State. If they are hard marble they will last.



7. Stonewalls, usually average centerline for interior walls. Boundary line walls laid more carefully than field clearing walls. Any of above marks may be in stonewall base stone for the exact corner.
8. Railroad rail driven vertically into the ground frequently marks railroad property corners. Occasionally has prick punch mark for exact point.
9. Iron pins or pipes driven into the ground have been used, they are readily moved either accidentally or maliciously.
10. Stake and stones = hardwood squared stake scribed with lot numbers, initials and marks, set in a ring of stones. Long after stake has rotted away its impression will be found in the ring of stones. Stones are set on end or in a way that looks man placed.
11. Tack and hardwood stake, limited life, easily moved.

## V. Private Land (continued)

12. Surveyor's blaze on trees will be chest high above ground or snowshoes. In North Country blazes may indicate number of axe handle lengths to the line. Frequently confused with loggers' cutting limit blazes. Life depends on the kind of tree blazed. Date trees have blazes, years surveyed, surveyors' marks scribed on them. Local practice varies for blazing line trees, facing or opposing marks and witness blazes.

Never blaze a trial line, use temporary flagging and stakes.

13. Iron name plates will have the tree grown over them but owners keep enough wood cut away for identification.
14. Paint on blazes, stakes or trees helps identify lines
  - a. Red = National Forest or Aerial Control Point
  - b. Blue = State forest
  - c. Other colors by private owners
15. Instrument straight plowed furrows can still be found marking property lines through the woods.
16. Fences when called for and obviously set to a line on posts.
17. Bounds called for usually govern.
18. Moving bounds or marks - penalty \$20.00 fine and/or 6 months in prison. RSA-572:25.
19. Retaining walls may or may not be on the property. Their ownership depends on conditions of original construction which is assumed to have been to prevent any change in the condition of abutting land surface.
  - a. When adding fill an owner builds a wall on his land to prevent spill on the abutter.
  - b. When excavating an owner builds a wall on his land to prevent settlement of the abutter's land.



## V. Private Land (continued)

Consequently original purpose of the wall helps decide which side of the wall may relate to the line.

20. Buried bounds may have special fill over the bound such as broken bricks, broken pottery or near the coast a bucket of clam shells which become a permanent white mass.

C. Adverse possession = boundaries indicated by use and occupancy for more than 20 years.

1. Construction obviously built to a supposed line.
2. Land use lines = tillage, pasture, woods, roads. Fences for these uses are apt to be convenience fences nailed to the nearest trees and not necessarily property lines.
3. Timber cutting may be on line or far enough from line to eliminate any chance of trespass.
4. When use and occupancy for more than 20 years trespasses on land ownership that can be established by Deed History, measure up the conflicting data and submit to abutters and their lawyers with a surveyor's recommendation for possible solution. Adverse possession is a legal decision.
5. Frequently Deed History shows who owns but cannot use because Adverse Possession has right to use but does not own. A new boundary line by agreement, executed by the lawyers, may clear up this situation. Court decisions seem to give the land to the adverse possessor.
6. Adverse possession cannot be acquired against the State of New Hampshire. This is important in connection with the islands in Great Ponds.
7. When a lawyer becomes desperate enough in his efforts to prove his client owns land with an inadequate or non-existent description, he will resort to a statement that use of the name of a land owner in a deed makes the name a bound. A name is not usable for angle and distance so it may constitute a kind of adverse possession. A paper by a lawyer is in order explaining how a name becomes a line or a corner.

## V. Private Land (continued)

### D. Surveying methods.

1. Magnetic bearings. Deeds more than 100 years old frequently have good courses and distances although recent descriptions for the same land will be by abutters' name only.

- a. Magnetic bearings have been used in surveys and in deed descriptions in New Hampshire for the past 300 years. Unless true north is specifically mentioned you can assume the bearings are magnetic.

When townships were divided into the parallelograms and rectangles of the large original tracts, the lines were called parallel on paper and made so on the ground by chaining. Where identical compass readings were used across several miles of a township the resulting lines are frequently not parallel.

Due to the many variations affecting compass readings it is not possible to mathematically correct an earlier reading and re-run the line precisely.

Because you will find many lawyers and judges and a few surveyors who believe they can take an isogonic chart or a published secular change table, correct the old bearing and re-run a line from this information, it is advisable for you to be able to list the variations affecting compass readings.

- b. Regular variations of the declination

- (1) Secular = changes from year to year extending in the same direction for several decades; popular meaning of declination. U. S. tables for





## V. Private Land (continued)

Concord, N.H. magnetic station at a point at the east bank of the Merrimack River give this variation west of true north. The general trend is:

1800 = $7^{\circ}$ - 24'	1940 = $15^{\circ}$ - 45'
1850 = $10^{\circ}$ - 14'	1950 = $15^{\circ}$ - 44'
1900 = $13^{\circ}$ - 02'	1960 = $15^{\circ}$ - 30'

(2) Annual = periodic variation approximately one minute per year.

(3) Daily = three to twelve minute swing, maximum east at 8 A.M. maximum west at 1:30 P.M. mean at 10 A.M. and 5:30 P.M. amount between three and twelve minutes depends on season and the locality with the lesser amount in winter and the greater in summer.

(4) Index error = individual compass variation, no two instruments the same unless comparatively adjusted.

### c. Irregular variations affecting the reading:

(1) Magnetic storms = 10 to 20 minute change; unpredictable.

(2) Local variations = surveys only a few miles apart can have changes that do not conform.

(3) Local attractions = pull on needle due to iron in rocks, railroad rails, wagon wheels, automobiles, axes, pants pockets or the surveyor's pipe. Also electric currents in power lines.

(4) Personal methods of reading, usually to the nearest quarter of a degree, i.e.... 15 minutes. Also parallax error if the reading is taken across instead of along the needle.

## V. Private Land (continued)

d. Obviously it is not advisable to try and mathematically determine a course to be run with your compass that will be the same line as the course in 1850.

The date when the compass was read is seldom given and there is no guarantee that it was the year that the deed was executed.

If the course given, corrected or uncorrected for variations, finds the bounds called for, it has served its purpose.

If compass course conversion is vital to the question at issue, then take a monumented line in the tract and read the bearing with your compass. The relationship of your reading to the original bearing will provide conversion for that line at that spot when using the same compass and probably for the other lines in that one tract.

Lacking two monuments on any one line of the tract make a record survey of existing features including roads, buildings and ground surface changes near probable property lines. Draw it up and on the basis of existing detail, extended deed history material and your own judgement make recommendations for the lines to the lawyers so they can execute boundary line agreements and eliminate the future conveyance of ambiguity.

e. Today we do not rely on compass readings for the lines of a tract. Intersecting bearings are the clearest way to describe the interior angles. Consequently an approximate reading of the compass needle is taken for one side as an initial reference then the bearings of all the other sides are computed so that they reflect the accurate transit angles. Succeeding generations will use these bearings to tell them the interior angles to be used in resurveying the tract and will not try to use a compass to reproduce any one line.

f. Early descriptions sometimes give bearings North or South of East and West, i.e....E.  $14^{\circ}$  S. In copying this became S.  $14^{\circ}$  E. The correct conversion is S.  $76^{\circ}$  E.



V. Private Land (continued)

- g. Abutting tracts have been surveyed at different times, each one with a closed description but no relation between the two sets of courses. Later they were combined into a single parcel. The description of the parcel copied the courses of the two tracts for the outside lines of the parcel instead of relating the interior angles described by the courses. Result = confusion copied forever after.
  - h. Descriptions subdividing a closed survey may have some courses traveling clockwise and others counterclockwise for the same lot. Description may read either clockwise or counterclockwise but should continue in the same direction for any given tract. Counterclockwise makes the double meridian distance computations for area easier.
2. Distances were in Gunter's or Surveyors' chains, rods, links.
- 1 chain = 66.0 ft. = 4 (16.5') rods = 100 (0.66') links.
- See Appendix for rod conversion table.
- a. Slope distances were usually corrected to horizontal.
  - b. Sometimes an arbitrary correction by recording every 31 chains as 30 chains was made in the early days for sag, sway and slope of the chain.
  - c. When old Colonial distances have been copied without any changes remember that the quality of the land may have affected the original distance cited. When ledge and swamp were not counted in the recorded distance the recorded bound will be found beyond the stated distance. Acreage was originally meant on a quality basis and undesirable land was not in the acreage figure although it was within the tract.
  - d. The Proprietors' Parallelogram Problem = Courses and distances given, opposite sides parallel, courses give correct interior angles but distance

V. Private Land (continued)

meant true width between the parallel sides, not side distances.

- e. Old distances read "more or less" which meant plus or minus one of the finest units given.

Rods more or less	= within 33.	feet
Links more or less	= within 1.32	feet
Feet more or less	= within 2.	feet
Tenths	= within 0.2	feet
Hundredths	= within 0.02	feet

Obviously when "rods +" are converted and used as "feet +" the possibility of a 33' instead of a 2<sup>+</sup> variation exists. The old more or less is still retained following the area figure in the description.

In court cases the lawyers will try to insist that only they can determine the meaning of more or less. In the field you will have to decide its meaning in the inaccurate descriptions the lawyers have been copying for generations.

- 3. Most of the descriptions now on record fail to tie the starting point to a fairly permanent reference point. It is advisable to give courses and distances along abutters' property and Right-of-Way lines back to a Town Line bound, State or City bound, main highway intersection, center of the nearest village or some similar reference point so that it will be possible to locate the tract described.
- 4. Accuracy of Closure for current surveys should reflect the land value.
  - a. Municipal work requires precise transit and tape with closed traverses computed for accuracy.
  - b. Rural work for low value land should be based on closed control traverses by transit and stadia or by compass and chain with graphic closure check.



## V. Private Land (continued)

5. Descriptions on today's record that are difficult to re-establish include:
  - a. All the land I may own in said town.
  - b. All my real estate wherever found.
  - c. To a road. (This road had the same name and three widely separated locations in the 200 years that the description was copied without change.)
  - d. Bounded by abutters' names only. Names not chronologically related.
  - e. Distance along a road "with sufficient depth to equal twenty acres." Angles of the sides not given.
  - f. A reasonable course and distance description but --
    - (1) No location tie or indication where it is in the township.
    - (2) Closing side "by the highway" no chance to check the figures.
    - (3) Starting and corner points of limited life. "to a pitch pine tree that was standing in 1815." "to a hole in the ice" (it's there if the winter is very cold.) "to the northwest corner of the passenger depot platform as it was in 1860." (Platform removed in 1863.)

## VI. CONTROL

### A. Horizontal

1. Second order triangulation stations' descriptions, plane coordinates and geographic positions available in State and private offices or direct from the U.S. Coast and Geodetic Survey, Washington, D.C.

## VI. Control (continued)

2. Bounded town lines.
  3. State Highway bounds.
  4. Coordinate control being established by the State.
  5. Local City control usually street bounds. Angular closure usually reasonable but distances seldom temperature and tension corrected.
- B. Vertical
1. USC & GS second order bench marks. Published data in State and private offices or direct from Washington.
  2. USGS third order bench marks. Published lists.
  3. State works and highways monumented to USC & GS 1929 Sea Level Datum.
  4. Municipalities usually have control through hydrants or bounds. If local datum the USC & GS conversion will be available. The part of the hydrant used varies locally, definite nut or mark on cap more constant than spindle.
  5. If USC & GS datum not reasonably available to site, then it is better to use, and so label, an approximate USC & GS elevation from the nearest road intersection as shown on the quadrangle than to have "assumed elevation 100" on plans for locations throughout the state.
- C. There are many triangulation marks on the USGS quadrangle maps that are not included in the published government lists. They were apparently set about 1934 by the New Hampshire Geodetic Survey.

## VII. GENERAL NOTES

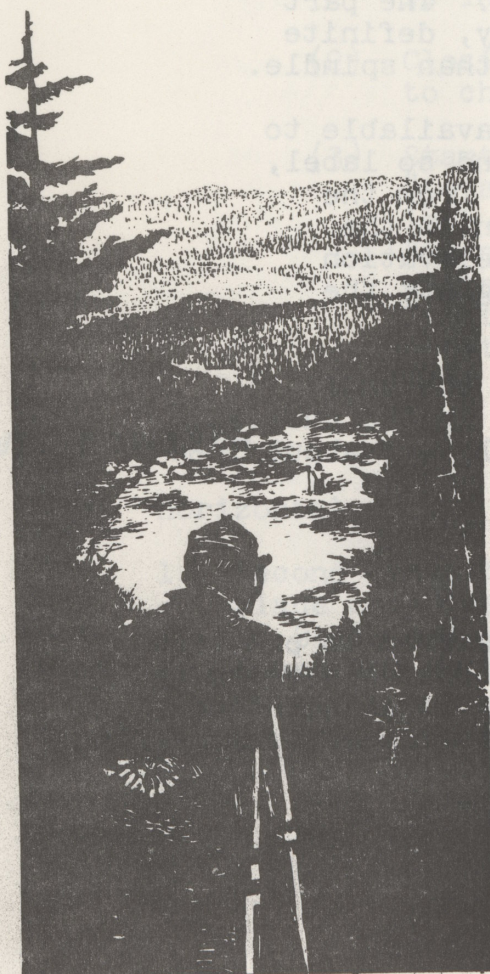
- A. Land surveyors do not have to be registered to practice in New Hampshire. Professional Engineers do have to be registered. To date there has been no local question about drawing a line between land surveying and engineering surveying.



## VII. General Notes (continued)

- B. A surveyor may practice in any part of the State. Experience will show that each county has its own peculiarities. The local surveyor will be more familiar with them and he will always help a surveyor who does not know the locality. He will be entitled to reciprocal treatment.
- C. There is no Land Court procedure in New Hampshire.
- D. There are no requirements for the filing of survey maps at the County Registries.\*
1. When the New Hampshire Society of Engineers was in existence in 1950, its Committee on Land Surveying Practice issued a Code of Minimum Standards which was a worthwhile attempt to improve surveying practices. The certificate recommended by this Code will be found on the surveys made in the 1950's. Copies of the Code may still be purchased at fifteen cents each from the New Hampshire Society of Professional Engineers, 18 School St., Concord, N.H.
  2. Currently the requirements of the Title Insurance companies combined with those of the NHSE Code when met or exceeded will result in reasonably complete work.
- E. Registrars of Deeds and Probate are called Registers in New Hampshire because the enabling legislation established that variation of the word registrar.
- F. Unrecorded deeds are valid in New Hampshire unless nullified by subsequent recordation. After Registry check for recorded information it is advisable to speak to all available abutters.

\*RSA 478 ch. 260 : rev. July 1965  
County option may adopt standard sizes.



## VII. General Notes (continued)

- G. Deed copying errors are recorded for generations and the surveyor's deed search will frequently have to go back 150 years to find worthwhile information.
- H. The lawyer certifies to a clear title to something somewhere. The surveyor has to determine what it is and where it is. The surveyor certifies to the use of all known recorded and physical data pertinent to the location of the land.
- I. A surveyor's search is devoted to finding valid bases for establishing the lines and corners of the tract. It uses all reference material that can be found. It is not the same as a lawyer's abstract and should never be held out as taking the place of an abstract. However it will help the lawyer prepare his abstract.
- J. Title Insurance is available through lawyers' offices in New Hampshire. Each Title Insurance company has detailed requirements to be fulfilled by the lawyer and by the surveyor. This recognition of the need for joint effort before a complete certification can be made will ultimately result in a clear land record in New Hampshire. It will probably take 100 years of joint effort to erase the errors and omissions of the last 100 years.

## VIII. DEFINITIONS OF LOCAL EXPRESSIONS

- A. Gore = a filler piece of land like the gore in a dress. Sometimes the filler between a circle such as the Masonian Curved Line and its tangent or an intersecting line, others are odd shaped areas between main divisions.
- B. Heater piece = triangular piece of land, possibly from its resemblance to an old flat iron.
- C. Bridge may refer to the structure or a District. "Beginning at a point near Rowell's Bridge" could be the present structure, the one that washed out in 1852, or the entire district which is now called West Hopkinton.
- D. Head Line = straight line across the ends of several lots. On 1749 Samuel Lane map of Bow "Governor Allen's Head Line" is the northwest side of Dunbarton and the southeast side of the Bow claim.
- E. Great Pond = any body of fresh water more than 10 acres in area, see p. 8.



## IX. OBSERVATIONS

Initially this outline was kept as an office record of some of the detail we learned from specific surveying projects. Later practicing surveyors and incipient engineers who wanted to become surveyors in New Hampshire had questions that were answered by these notes. To save hours of explanation on our part and years of struggle on their part we blue-line printed the outline and gave them copies. The material was frequently revised in the light of new experience. Consequently there are out of date copies in offices and libraries even as parts of this writing will be out of date in our office tomorrow.

The material is not annotated. An annotated issue can be prepared with a major expenditure of time. If such a presentation is made it should be a thorough one. In the case of deed comments it will list year, Registry volume and page, grantor, grantee, person preparing the deed and location of the land. For other items the particular project and client will be given.

After twenty years of dealing with the confusion that is our land record, as far as surveying precision is concerned, we are still trying to explain how the record got that way.

The Proprietors' Company received a definite grant of land. The members met, engaged the services of a surveyor and sent him to the site to lay out the total grant and its main divisions. He reported back to the Company on the site conditions. The lawyer for the Company drew up the lot descriptions from the surveyor's plan. The members settled their lots and maintained the lines. The surveyors and lawyers were usually competent.

When today's surveyor and owner can afford the time and the money to develop a complete Deed History Comparison Plan for the part of the township they are interested in, they will find good controlling material for the original lots. In undisturbed areas original monuments still exist.

However this tracing back is difficult for many reasons:

1. Original proprietors' plans and descriptions may be lost.
2. Deeds did not have to be recorded.
3. During the American Revolution from 1775 - 1789 deeds were held and not recorded because there was no stable government.
4. In the 1850's and 1860's deed descriptions stopped copying courses and distances and used only abutters'

## IX. Observations (continued)

names or less. A careful chain of title was usually maintained but the physical identification was abandoned. Possibly too many lawyers and surveyors went west for the land boom and the rest signed up for the Civil War.

Admitting the existing unsatisfactory physical description record it is difficult to explain the occasional opposition to recording a positive mathematical description that has a sound Deed History foundation. Apparently if a description by abutters' names only has been used for the last thirty years any correction to positive courses and distances may be suspect because it lacks current precedent.

The difference between legal and engineering approaches to land problems contributes to the difficulties. Once a lawyer has accepted a client he shapes every effort to proving that his client is right and the opposition wrong. An engineer informs his client that he will work only for the most nearly correct answer to the problem although it may prove the client to be wrong. A negative answer is still an answer.

Property records are slighted in some offices, both lawyers' and engineers', as an unimportant interruption to their work.

The lawyer may say that any attempt to clarify a poor description will cost more in surveyor's time than it is worth and a clear title can be continued to something that the real estate dealer, the owner and the mortgaging bank think they can identify.

The civil engineer starts out with surveying as the first rung of a ladder he is anxious to climb. Many engineers continue to rate the survey as the least part of the design. They can run precise angles and distances. It is something else to be positive they are in the correct location. Also engineers as a group dislike court cases with the probable result that their considered technical opinions will be nullified by some legal obfuscation.

If a single deed is run out without a clear understanding of its relation to the larger parent tracts, it can perpetuate errors on the ground just as much as copying errors keep them on the record.

Property owners accept inaccurate and vague descriptions because they have neither the interest nor the money to correct them.



## IX. Observations (continued)

As land becomes valuable for development, the record will be clarified before major investments will be made.

If lawyer and surveyor will work together for an improved record, as indicated above under Title Insurance, then it will be possible to enlist the services of competent lawyers and surveyors to carry out a difficult assignment.

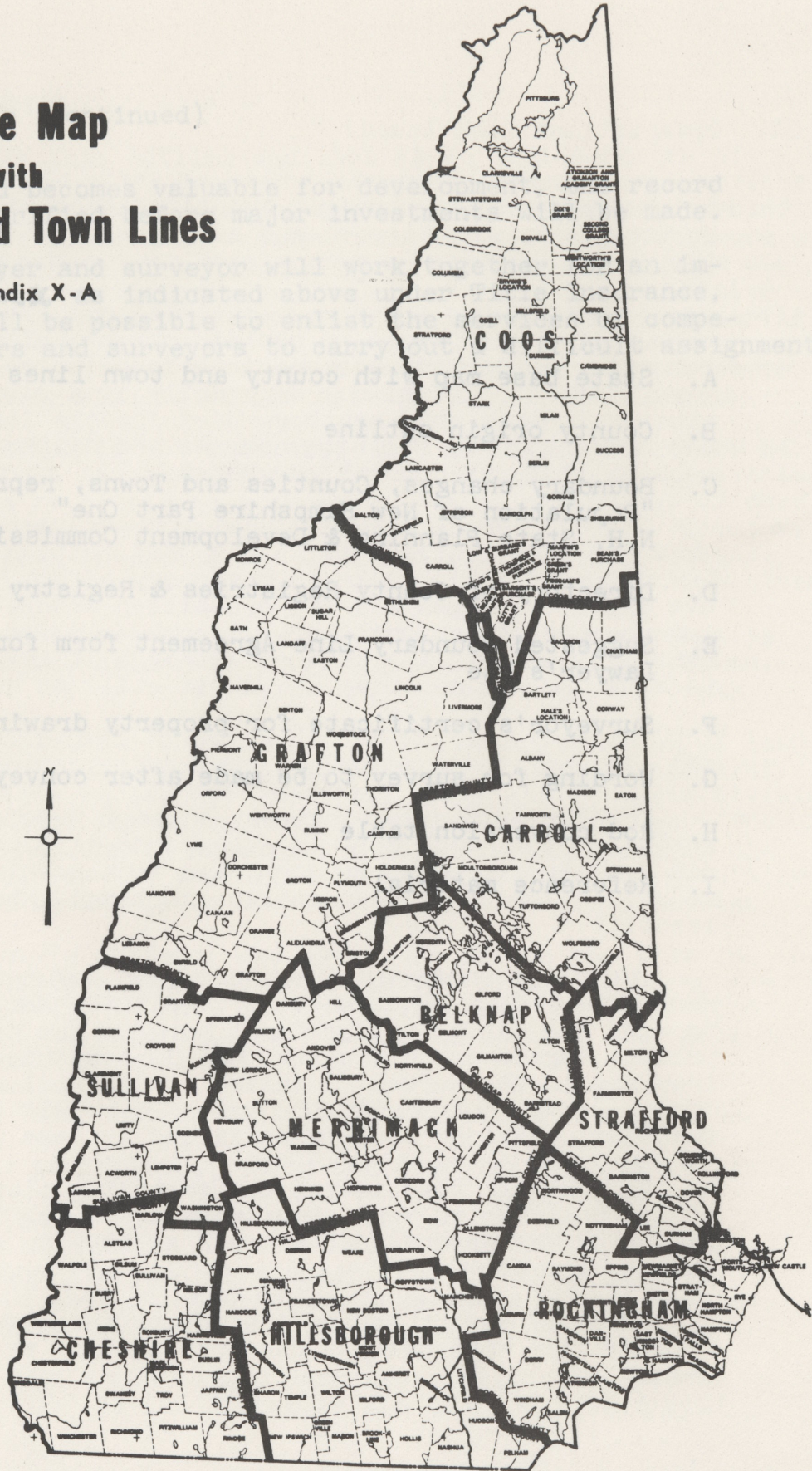
## X. APPENDIX

- A. State base map with county and town lines
- B. County origin outline
- C. Boundary changes, Counties and Towns, reproduced from "Population of New Hampshire Part One" N.H. State Planning & Development Commission
- D. Directory of County Registries & Registry plan sizes
- E. Suggested Boundary Line Agreement form for Lawyer's Use
- F. Surveyor's certificate for property drawings
- G. Wording for survey to be made after conveyance
- H. Rod conversion table
- I. Reference material



# Base Map with County and Town Lines

Appendix X-A



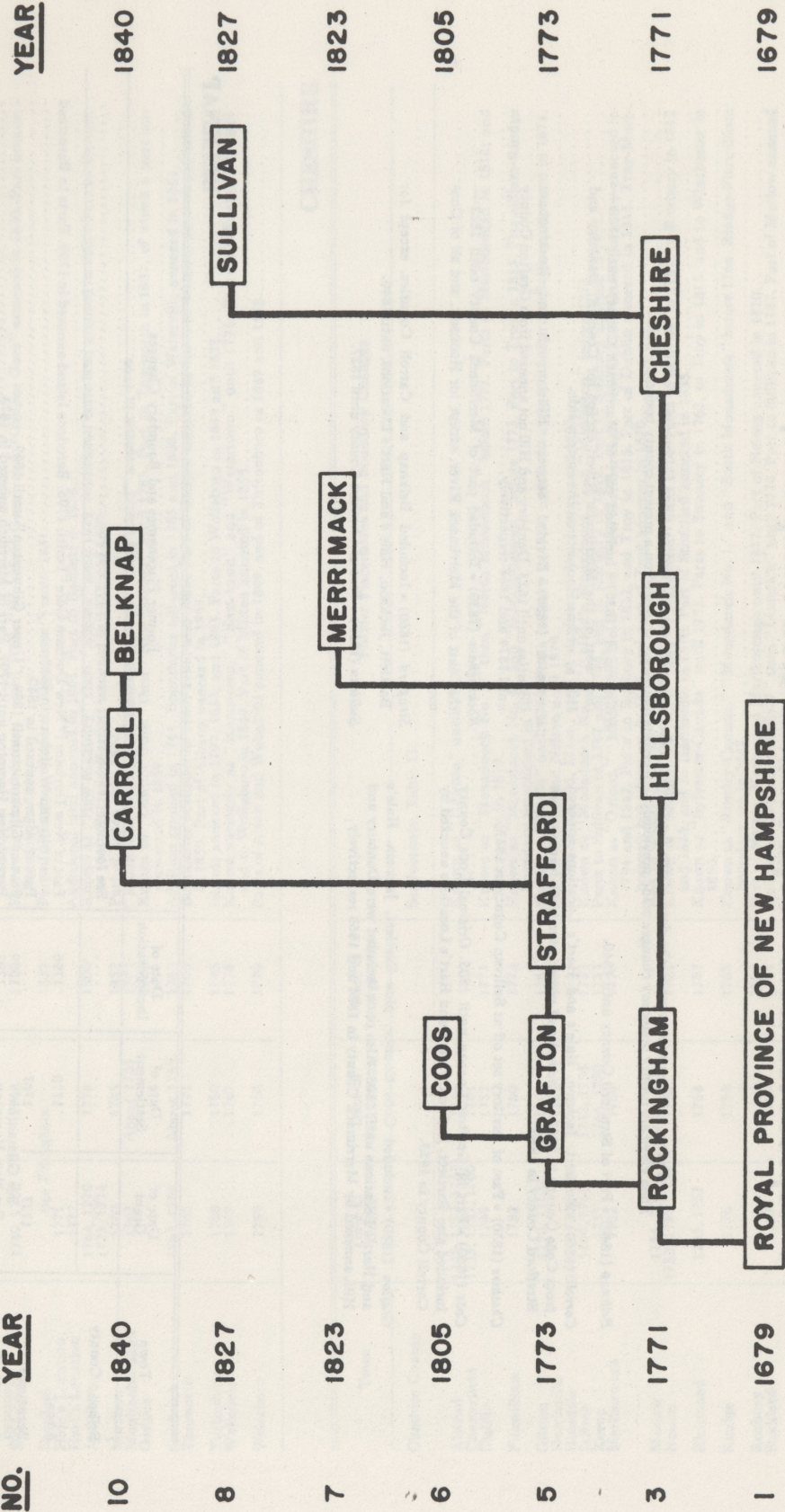
REVISED JULY 1966  
SOURCE: U.S.G.S.

PREPARED BY STATE OF NEW HAMPSHIRE  
DEPARTMENT OF RESOURCES AND ECONOMIC DEVELOPMENT

SCALE IN MILES  
0 2 4 6 8 10

Appendix X-B

## ORIGIN of the COUNTIES of the STATE of NEW HAMPSHIRE





BOUNDARY CHANGES, COUNTIES AND TOWNS  
reproduced from "Population of New Hampshire, Part 1"

Given after each county name is the date of the first census taken after the county had attained its present boundaries. Then given are county boundary changes made previously. All census figures are compiled on a present county boundary basis.

**Belknap** (1840) • Part of Strafford County until 1840.  
**Carroll** (1860) • Bartlett, Jackson, Hale's and Hart's Locations annexed from Coös County in 1853. Remainder of present territory formed from Strafford County in 1840.  
**Cheshire** (1830) • Part of territory set off as Sullivan County in 1827.  
**Coös** (1860) • Part of Grafton County until 1805. Original Coös County included also Bartlett, Jackson, Hale's and Hart's Locations annexed by Carroll County in 1853.  
**Grafton** (1880) • Included Coös County, plus Bartlett, Jackson, Hale's and Hart's Locations until 1805. Also once included were Danbury and Hill, annexed by Merrimack County in 1874 and 1868 respectively;

**Hillsborough** (1830) • Included part of Merrimack County until 1823 — that west of the Merrimack River, except for Concord, Danbury and Hill, as well as Hooksett on the eastern side.  
**Merrimack** (1880) • Divided between Hillsborough and Rockingham Counties until 1823. Danbury and Hill not annexed from Grafton County until 1874 and 1868 respectively.  
**Rockingham** (1830) • Included part of Merrimack County until 1823 — that east of the Merrimack River, except for Hooksett, and all of Concord.  
**Strafford** (1860) • Included Belknap and Carroll Counties, except for Bartlett, Jackson, Hale's and Hart's Locations, until 1840.  
**Sullivan** (1830) • Part of Cheshire County until 1827.

BELKNAP

Town	Date of Grant	Date of Settlement	Date of Incorporation	Former Placenames and Boundary Changes
Belknap County	....	....	....	See footnote, Table II.....
Alton	....	1770	1796	Part of New Durham ("New Durham Gore") until 1796. Barndoor Island annexed in 1799. Parts to Barnstead in 1840 and Wolfeboro in 1849.
Barnstead	1727	1767	1859	Part of Alton annexed in 1840.
Belmont	See Gilmanton	See New Hampton	1797	Part of Gilmanton until 1797. Part of Meredith annexed in 1873.
Center Harbor	See New Hampton	1781	1812	Part of New Hampton ("Gunstock Parish") until 1812. Six islands in Lake Winnepesaukee annexed in 1826. Part of Gilmanton annexed in 1851. Part to Laconia 1874, and part re-annexed in 1876.
Gilford	....	....	....	Part of Gilmanton annexed in 1851. Parts became Gilford in 1812 and 1851, and Belmont in 1859.
Gilmanton	1727	1761	1727	Governor's Island annexed in 1799. Parts became Gilford in 1812 and 1851, and Belmont in 1859.
Laconia	See Meredith	Alter 1750	1768	Part of Meredith until 1855. Part of Gilford annexed in 1874, and returned in 1876.
Meredith	1748	....	1768	Known variously as "Palmerstown" and "New Salem" until 1768. Stonedam and Bear Islands annexed in 1799. Parts to Laconia in 1855, and Center Harbor in 1873.
New Hampton	1765	About 1765	1777	Part became Center Harbor in 1797.
Sanbornton	1748	About 1765	1770	Part to Franklin in 1828. Part became Tilton in 1869, and between 1870 and 1872. Part of Tilton re-annexed in 1870.
Tilton	See Sanbornton	1764	1869	Part of Sanbornton ("Sanbornton Bridge") until 1869. Part returned to Sanbornton in 1870. And an additional part of Sanbornton annexed between 1870 and 1872.

Appendix X-C (continued)

CARROLL

Town	Date of Grant	Date of Settlement	Date of Incorporation	Former Placenames and Boundary Changes
Carroll County	....	....	....	See footnote, Table II.....
Albany	1766	1766	1766	Albany-Tamworth boundary set in 1796. Known as "Burton" until 1833. Part to Tamworth in 1857.
Bartlett	1765, 1769	About 1775	1790	Part of Jackson (then "Adams") annexed in 1819, state land in 1823, part of Chatham in 1869, and part of Hart's Location in 1878. Parts to Jackson in 1822 and 1839.
Brookfield	1770, 1772	....	1794	Part of Middleton until 1794.
Chatham	1767	1781	....	Part of Conway annexed in 1823. Part to Bartlett in 1869.
Conway	1765	1763	1765	Known as "Pigwacket" and "Pequawket" before 1765. Stark's and Sterling's Locations annexed in 1800.
Eaton	1760	1784	....	Part to Chatham in 1823.
Effingham	1749, 1766	1768	1778	Additional land annexed in 1795. Tamworth-Eaton boundary set in 1796 and revised in 1809. Part became Madison in 1852.
Freedom	See Effingham	....	1831	Known as "Cavayitstown" until 1778. "Wakefield Gore" and "Ossipee Gore" annexed in 1820. Part became Freedom in 1831.
Hale's Location	1771	....	....	Part of Effingham ("North Effingham") until 1831.
Hart's Location	1772	....	....	Additional land annexed in 1861. Part to Bartlett in 1878.
Jackson	1764, 1770	1778	1800	Known as "New Madbury" then "Adams" until 1829. Additional state land granted in 1806. Part to Bartlett in 1819. Parts of Bartlett annexed in 1822 and 1839.
Maillon	1773, 1774	1785	1852	Part of Eaton until 1852.
Moultonborough	1760	About 1765	1777	Known as "Moultonborough Gore" then "New Garden" until 1785. Part to Tamworth in 1837, of which a part was reannexed in 1859.
Ossipee	1763	....	1785	Known as "Ossipee Gore" then "New Garden" until 1785. Part to Tamworth in 1837, of which a part was reannexed in 1859.
Sandwich	1763, 1764	About 1765	1763	Additional granted in 1764. Boundaries adjusted in 1785 and 1808. Part of Waterville annexed in 1864.
Tamworth	1766	1771	1766	Boundaries adjusted in 1785, 1796, and 1808. Part of Ossipee annexed in 1837, of which a part was returned in 1859. Part of Albany annexed in 1857.
Tuftonboro	1750	1780	1795	Islands annexed in 1785, 1796, and 1808. Part of Ossipee annexed in 1837, of which a part was returned in 1859.
Wakefield	1749	1767	1774	Known variously as "Hartstown", "East-town", and "Watertown" until 1774. Part to Effingham in 1820 and to Wolfeboro in 1849. Part of Milton annexed in 1853.
Wolfeboro	1759	1768	1770	Part of Wolfeboro in 1849, and of Tuftonboro in 1849 and 1858.

CHESHIRE

Town	Date of Grant	Date of Settlement	Date of Incorporation	Former Placenames and Boundary Changes
Cheshire County	....	....	....	See footnote, Table II.....
Alstead	1735, 1752, 1763	1764	....	Known as "Newton" until 1763.
Chesterfield	1735, 1752, 1760	1761	....	Known as "Monadnock No. 3" then "North Monadnock" before 1771. Parts to Marlborough in 1818, and Hambleton in 1870.
Dublin	1749	1752	1771	Known as "Monadnock No. 4" and "Stoddardstown" before 1773. Part to Troy in 1815. Fitzwilliam-Rindge boundary established in 1847.
Fitzwilliam	1752	1760	1773	Known as "Boyle" until 1763. Parts to Surry in 1769, and Sullivan in 1787. Part of Sullivan annexed in 1874.
Gilsum	1752, 1763	1762	1763	Part of Dublin and Nelson until 1870.
Harrisville	1762	1762	1870	Part of Northfield, Mass., until 1741, then of Winchester until 1753.
Hinsdale	1762	1762	1753	Part of Northfield, Mass., until 1741, then of Winchester until 1753.
Jaffrey	1687, 1733, 1753	1752, 1758	1773	Known as "Monadnock No. 2", "Middle Monadnock", and to Roxbury 1812. Part of Swansey annexed in 1812.
Keene	1749, 1767	1752, 1758	1753	Parts to Sullivan in 1787 and 1794, and to Roxbury 1812. Part of Swansey annexed in 1812.
Marlborough	1735	1746, 1750	1776	Known as "Oxford", "Monadnock No. 1", and "Marlborough" before 1776. Parts of Swansey annexed in 1794 and 1842. Parts to Roxbury in 1812, and to Troy in 1815.
Marlow	1753, 1761	About 1761	....	Part of Marlborough set in 1841, and part of Troy annexed in 1870.
Nelson	1752, 1767, 1774	1767	1774	Part to Stoddard in 1797.
Richmond	1735, 1752	1758	1752	Known as "Monadnock No. 6" then "Packersfield" until 1814. Parts to Sullivan in 1787, to Roxbury in 1812 and 1820, and to Harrisville in 1870. Part of Stoddard annexed in 1835.
Rindge	1736	1754	1768	Known as "Sylvester-Canada" until 1752. Parts to Swansey in 1762, to Troy in 1815, and to Winchester in 1850.
Roxbury	....	....	....	Known as "Roxbury-Canada", "Monadnock No. 1", and "South Monadnock" before 1768. Rindge-Fitzwilliam boundary set in 1847.
Stoddard	1752	1769	1812	Part of Nelson, Keene and Marlborough until 1812. Part of Nelson annexed in 1820.
Sullivan	1769	1768	1774	Known as "Monadnock No. 7" then "Limerick" until 1774. Part to Sullivan in 1787. Part of Marlow annexed in 1797. Part to Nelson in 1835.
Surry	1744	1768	1787	Part of Dublin and Nelson until 1870.
Swansey	1733	1747, 1750	1753	Part of Stoddard, Nelson, Keene, and Gilsum until 1787. Part of Keene annexed in 1794. Part to Gilsum in 1874.
Troy	....	1761	1815	Part of Westmoreland and Gilsum until 1769.
Walpole	1736, 1752	1749	1752	Part of Richmond annexed in 1762. Parts to Marlborough in 1794 and 1842, to Keene in 1812, and to Troy in 1815.
Westmoreland	1735, 1752	1741	1752	Part of Marlborough, Fitzwilliam, Swansey, and Richmond until 1815. Troy-Marlborough boundary set in 1847. Part to Marlborough in 1870.
Winchester	1733, 1753	1734	1753	Part to Surry in 1769.



Town	Date of Grant	Date of Settlement	Date of Incorporation	Former Placenames and Boundary Changes	
				See footnote, Table II.	
Coos County					
Atkinson and Gilman-ton Academy Grant	1809				Known as "Maynesborough" until 1829.
Beila Purchase	1832	1821	1829		
Berlin	1771	About 1835	1832		Known as "Bretton Woods" until 1832. Annexations of territory made in 1848, 1878 and 1887.
Cambridge	1773	About 1795			Known as "Dartmouth College Grant" until 1853.
Carroll	1772	1832	1853		
Chandler's Purchase	1835		1796		Known as "Cockburne" until 1811. "Wales Location" annexed in 1804.
Clarksville	1762, 1770	Before 1780	1797		Part of Littleton until 1784.
Colebrook	1762, 1770				
Columbia	1834	1764			
Crawford's Purchase	1764, 1770				
Dalton					
Dartmouth College Grant	1807				
Dix's Grant	1809				
Dixville	1805				Part of Stark annexed in 1868.
Dummer	1773	About 1805	1848		
Dunmer	1774	About 1800	1836		Known as "Shelburne Addition" until 1836.
Eaton's Location	1775	1805	1836		
Gorham	1770	1772	1796		Part of Kilkenny annexed in 1842.
Green's Grant	1774				Parts to Jefferson and Lancaster in 1842.
Jefferson	1765	1772	1763		"Barker's Location" annexed in 1819, part of Stark in 1840, and part of Kilkenny in 1842.
Kilkenny	1774	1764	1824		Known as "Paulsbourg" until 1824.
Lancaster	1763, 1769	About 1805			Known as "Stonington" until 1779. Parts of Stark annexed in 1855 and 1863.
Martin's Location	1773		1779		
Milan	1771	1767	1840		Known as "Indian Stream Territory" until 1840. Boundaries set in 1848.
Millsfield	1774		1824		Known as "Durand" until 1824.
Northumberland	1761, 1771				Known as "Indian Stream Territory" until 1840. Boundaries set in 1848.
Odeil	1834		1820		Known as "Durand" until 1824.
Pinkham's Grant	1835	About 1800	1795		Part to Gorham in 1836.
Pittsburg		About 1795			Known as "Percy" until 1832. Part of Stratford and "Winslow's Location" annexed in 1832. Parts to Lan-caster in 1840, to Northumberland in 1855 and 1863, and to Dummer in 1868.
Randolph	1772	1774	1779		Known as "Stuart" and "Stuart Town" until 1799.
Sargent's Purchase		About 1780			Part to Stark in 1832.
Shelburne	1668, 1769	1771			
Stark	1774				
Stewartstown	1770				
Stratford	1762, 1773	1771			
Success	1773				
Thompson and Warner's Purchase	1835				
Warner's Patent			1881		
Wentworth's Location			1804		
Whitefield	1744	1801			
"Other Settlements"					

NOTE: Four unincorporated civil divisions of this county for which no population has been returned are not included in this table: these divisions are as follows: Bean's Grant, Cutt's Grant, Hadley's Purchase, Low and Burbank's Grant. Figures for Pittsburg town in 1920 include population reported for "Colebrook Academy Grant" (15), "Hubbard Township" (358) and "Webster Township" (51).

Town	Date of Grant	Date of Settlement	Date of Incorporation	Former Placenames and Boundary Changes	
				See footnote, Table II.	
Grafton County					
Alexandria	1753, 1773	1769	1782		Additional territory granted in 1773. Parts became New London in 1779, Bridgewater in 1788, and Danbury in 1795. A part to Hill (then "New Chester") in 1820. And a part of Orange annexed in 1820.
Ashland		1765	1868		Part of Holderness until 1868.
Bath	1761, 1769	About 1765			Part of Holderness until 1868.
Benton	1764	About 1776			Known as "Covenry" until 1840.
Bethlehem	1774	1794	1799		Known as "Lloyd Hills" until 1799. Additions made to town in 1848 and 1873.
Bridgewater		1766	1788		Part of Alexandria and Hill (then "New Chester") until 1788. Part became Bristol in 1819.
Bristol		1767	1819		Part of Bridgewater and Hill (then "New Chester") until 1819.
Campton	1761, 1767	1765	1771		Part to Plymouth in 1860.
Canaan	1761, 1769	1766	1772		Boundaries adjusted in 1802. "Dames Gore" annexed in 1846. "Gates' Gore" annexed in 1851.
Dorchester	1761, 1766, 1772	1772	1876		Part of Landaff until 1876.
Easton	See Landaff				Known as "Trecothick" until 1802.
Ellsworth	1769	1790	1802		Known as "Relhan" until 1784. Boundaries adjusted in 1802. Part of Grantham annexed in 1837.
Enfield	1761, 1768	About 1780	1778		Known as "Morristown" until 1782.
Franconia	1764, 1772	1774	1778		Boundaries adjusted in 1802.
Grafton	1761, 1769	1772	1796		Known as "Cockermouth" until 1796. Part to Hebron in 1792. Part of Hebron annexed in 1845.
Groton	1761, 1766	1770			Additional grants in 1771 and 1775.
Hanover	1761	1765			Became part of Livermore in 1876.
Hatch and Cleaves Grant					
Hebrill					
Hebron	1763	1761	1792		Part of Groton (then "Cockermouth") and Plymouth until 1792. Land exchanged with Orange in 1804 and 1808. Parts to Plymouth and Groton in 1845.
Holderness	1751, 1761	1763	1816		Known as "New Holderness" until 1816. Part became Ashland in 1868.
Landaff	1764, 1770	1770	1774		Part of Lincoln annexed in 1845. Part to Lisbon in 1859. Part became Easton in 1876.
Lebanon	1761	1761			Part to Landaff in 1845. Part of Livermore annexed in 1908.
Lincoln	1764	About 1780			Known as "Concord," "Chiswick," and "Gunthwaite" before 1824. Part of Landaff annexed in 1859.
Lisbon	1763, 1768	1768	1784		Known as "Apthorp" until 1784, when part became Dalton.
Littleton	1764, 1770	1770	1876		Made up of numerous grants in 1876. Part of Lincoln annexed in 1908.
Livermore					Part became Monroe in 1834.
Lyme	1761	About 1770			Part of Lyman until 1854. Part of Bath annexed in 1897.
Monroe	1761	1764	1854		Known as "Cardigan" until 1790. Land exchanged with Hebron in 1804 and 1808. Part to Alexandria in 1820.
Orange	1769	See Lyman	1781		Part to Wentworth in 1837.
Orford	1761	1769			Part to Hebron in 1792. Part of Hebron annexed in 1819 and 1822.
Piermont	1764	1768	1764		Part to Hebron in 1792. Part of Hebron annexed in 1845, and of Campton in 1860.
Plymouth	1763	1764	1763		Boundaries defined in 1847.
Rumford	1761, 1767	1765	1781		"Blanchard's Gore" annexed in 1807 and "Waterville Gore" in 1842.
Timbucton	1763, 1768	1770	1763		Additional territory granted in 1770. Boundaries established in 1784.
Tunton	1763	1767	1829		Known as "Gillis and Foss Grant" until 1829. Part to Sandwich in 1864.
Warren	1763	1819	1776		Part of Piermont annexed in 1787 to be returned in 1819 and 1822, and part of Orford annexed in 1837.
Waterville	1766, 1772	1770			Known as "Peeling" then "Fairfield" until 1840.
Wentworth	1763, 1771	1773	1840		
Woodstock					



HILLSBOROUGH

Town	Former Placenames and Boundary Changes			
	Date of Grant	Date of Settlement	Date of Incorporation	
Hillsborough County	....	....	....	See footnote, Table II.
Amherst	1728	1735	1760	Part of "Monson" annexed in 1770. Parts became Milford in 1794 and Mont Vernon in 1803. Part of Milford reannexed in 1842. "Society Land" until 1777. Part to Hancock in 1849.
Antrim	1733	1744	1777	Part of Deering (then "Society Land") until 1777. Part to Hancock in 1849.
Bedford	1733	1736	1750	Part to Manchester in 1853.
Bennington	....	About 1770	1842	Last remaining part of "Society Land" until 1842. Parts of Deering, Hancock, Francess town, and Greenfield annexed in 1842.
Brookline	1637	About 1750	1769	Known as "Raby" until 1798. Part of Hollis until 1769. Additional parts of Hollis annexed in 1786 and 1787.
Deering	1774	1765	1774	Part of "Society Land" until 1774. Parts to Francess town in 1772 and 1802, to Greenfield in 1791, to Hancock in 1794, and to Bennington in 1842.
"Derryfield Gore"	1752	1760	1772	Part of Deering (then "Society Land") and New Boston until 1772. Parts of Greenfield annexed in 1792 and 1872, and of Deering in 1802. Part to Bennington in 1842.
Francess town	1733, 1748	1748	1761	Part of New Boston annexed in 1836. Parts to Hooksett in 1822, and to Manchester in 1853. Dunbarton-Goffstown boundaries set also in 1853.
Goffstown	....	1771	1791	Part of Peterborough, Lynde borough, and Deering until 1791. Parts to Francess town in 1792 and 1872, and to Bennington in 1842.
Greenfield	....	1752	1872	Part of Deering annexed in 1794, and part of Antrim in 1849. Part to Bennington in 1842.
Greenville	1735	1752	1772	Part of Amherst (then "Monson") annexed in 1770, and of Nashua in 1739, 1763, and 1773. Parts to Brookline in 1769, 1786, and 1787.
Hancock	1735, 1748	1738	1772	Known as "Nottingham West" until 1830. Part of Londonderry annexed in 1778.
Hillsborough	1673	1730	1746	Known as "Naticook" then "Brenton's Farm" before 1734.
Hollis	....	1720	1749	Parts to Wilton (date unknown), to Greenfield in 1791, to Temple in 1796, to Mont Vernon in 1853, and to Milford in 1873.
Hudson	1673	1710	1746	Part of Wilton (date unknown), to Greenfield in 1791, to Temple in 1796, to Mont Vernon in 1853, and to Milford in 1873.
Litchfield	1729	1750	1764	Became part of Greenfield in 1791.
Lynde borough	1735, 1753	1750	....	Known as "Harrytown," "Old Harrytown," "Tyngstown," and "Derryfield" before 1810. Part of London-derry annexed in 1751, and of Goffstown and Bedford in 1853.
"Lynde borough Gore"	1735	1722	1751	Part became Greenville in 1872.
Manchester	....	1749	1768	Additional land granted in 1750. In 1769, the remainder becoming Milford in 1794.
Mason	1749	1722	1746	Part of Brookline (then "Raby") in 1769, the remainder becoming Milford in 1794.
Merrimack	1729	1740	1794	Part of Amherst until 1803. Part of Lynde borough annexed in 1853.
"Mile Slip"	1728, 1733	1740	1803	Part of Amherst until 1803. Part of Lynde borough annexed in 1853.
Milford	....	About 1665	1746	Known as "Unstable" until 1836. Parts to Hollis in 1739, 1763, and 1773.
Mont Vernon	1673	1742	1763	Known as "Lanestown" until 1763. Part to Francess town in 1772, and to Goffstown in 1836.
Nashua	1735, 1751	1738	1763	Known as "Lanestown" until 1763. Part to Francess town in 1772, and to Goffstown in 1836.
New Boston	1735, 1750	1721	1762	A Gore of land between Pelham and Windham annexed in 1830.
New Ipswich	....	1721	1760	Known as "Souhegan" until 1760. Part to Temple in 1789. Part to Greenfield in 1791.
Pelham	1737	1749	1760	Known as "Peterborough Slip" until 1791. Part incorporated as Temple in 1768, the remainder becoming Sharon in 1791.
Peterborough	....	About 1760	1791	Part became Deering in 1774. Parts to Francess town in 1772, and 1802, to Greenfield in 1791, and to Hancock in 1794. The rest became Bennington in 1842.
Sharon	....	....	....	Known as "Peterborough Slip" and "Sliptown" until 1768 when part of Wilton was also annexed. Part of Peterborough annexed in 1789, and of Lynde borough in 1796.
"Society Land"	....	....	....	Known variously as "Beverly-Canada," "Halestown," "Robestown," and "Wearestown" before 1764. Weare-Dunbarton boundary set in 1853.
Temple	1750	About 1760	1768	Part to Temple in 1768. Part of Lynde borough annexed (date unknown).
Weare	1735, 1749	1750	1764	Known as "Campbell's Gore" until 1798. "Wheeler's Gore" annexed in 1797.
Wilton	1735, 1749	1739	1762	
Windsor	....	After 1775	1798	

† Included with Henniker (Merrimack County).

MERRIMACK

Town	Former Placenames and Boundary Changes			
	Date of Grant	Date of Settlement	Date of Incorporation	
Merrimack County	....	....	....	See footnote, Table II.
Allenstown	1722	1747	1831	Part to Pembroke in 1759. Pembroke-Allenstown boundary set in 1798. Part of Bow annexed in 1815, and of Hooksett in 1853.
Andover	1751	1761	1779	Known as "Bowenstown," "New Breton," and "Emerystown" until 1779. Part to Franklin in 1828.
Boscawen	1733	1733	1760	Part became Webster in 1860.
Bow	1727	1728	....	Parts to Pembroke in 1759 and 1804, to Concord in 1765, 1804, and 1856, to Hopkinton in 1763, and to Allens-town in 1815.
Bradford	1771	1771	1787	Part of Washington annexed in 1787, and parts of Newbury in 1795 and 1859.
Canterbury	1727, 1765	1727	1727	Parts became Loudon in 1765, and Northfield in 1780. Additional parts to Concord in 1784, and to Loudon in 1853.
Chichester	1727	1758	1733, 1765	Part became Pittsfield in 1782.
Concord	1725	1727	....	Known as "Rumford" until 1765. Parts of Canterbury and Loudon annexed in 1784, and parts of Bow in 1765, 1804 and 1878.
Danbury	See Alexandria	....	1795	Part of Alexandria until 1795. Boundaries set in 1808. Part of Hill annexed in 1858, and parts of Wilmot in 1848 and 1878.
Dunbarton	1735, 1748, 1752	1749	1765	"Gorhamtown" and "Starkstown" until 1765. Part to Hooksett in 1822. Dunbarton-Goffstown and Dun-barton-Weare boundaries set in 1853.
Dunbarton	....	....	....	Part of Andover, Salisbury, Northfield, and Sornborton until 1828. Part of Northfield annexed in 1828, returned in 1830, and returned to Dunbarton in 1858. Additional part of Northfield annexed in 1861. Part to Salisbury in 1869.
Epsom	1727	About 1725	1727	Known as "New Marlborough," "Marlboroughtown," and "Toddstown" until 1768.
Franklin	....	1759	1828	Known as "New Marlborough," "Marlboroughtown," and "Toddstown" until 1768.
Henniker	1735, 1752	1760	1768	Known as "New Chester" until 1837. Part to Bridgewater in 1788. Hill-Danbury boundary set in 1808. Part became Bristol in 1819. Part of Alexandria annexed in 1820. Parts to Wilmot in 1832 and to Danbury in 1858.
Hill	1753	1765	1778	Part of Chester, Dunbarton, and Goffstown until 1822. Part to Allenstown in 1853.
Hooksett	See Dunbarton	1737	1822	Boundaries set in 1741. Part of Bow annexed in 1763.
Hopkinton	1735, 1750	1737	1765	Parts went to New London in 1793, Wilmot in 1807, and the rest to Warner in 1818.
"Kearsarge Gore"	....	1760	1773	Part of Canterbury until 1765. Part to Concord in 1784. Part of Canterbury annexed in 1853.
Loudon	....	1760	1778	Known as "Dantzick" then "Fishersfield" until 1837. Part to Goshen in 1791. Parts to Bradford in 1796 and 1859.
Newbury	1753, 1772	1762	1778	Known once as "Heidlebourg." Part of Alexandria until 1779. Part of "Kearsarge Gore" annexed in 1793 and parts of Sunapee in 1804 and 1817. Part to Wilmot in 1807.
New London	1753, 1773	1775	1779	Part of Canterbury until 1780. Part to Franklin in 1801.
Northfield	....	About 1760	1780	Additional land annexed to Franklin in 1801.
Pembroke	1728	1729	1759	Known as "Suncook" then Lovewellstown before 1759. Part of Allenstown annexed in 1759, then Pembroke-Allenstown boundary set in 1798. Parts of Bow annexed in 1759 and 1804.
Pittsfield	See Chichester	About 1750	1782	Set off from Chichester in 1778.
Salisbury	1736, 1749	About 1750	1768	Known as "Bakerstown," "Gorhamtown," "Stevenson," and "New Salisbury" before 1768. Parts to Frank-lin in 1828 and to Concord in 1853.
Sutton	1749, 1767	1767	1784	Known as "Poytown" until 1784.
Warner	1735, 1749, 1767	1762	1774	Known as "New Amesbury," "Jenness-town," then "Ryestown" before 1774. "Kearsarge Gore" annexed in 1818.
Webster	See Boscawen	1762	1860	Part of Boscawen until 1860.
Wilmot	See New London	....	1807	Part of New London and "Kearsarge Gore" until 1807. Part of Hill annexed in 1832. Parts to Danbury in 1848 and 1878.

\* Includes Hancock and Hillsborough populations.

† Sutton and Newbury populations reported together.



Town		Date of Grant	Date of Settlement	Date of Incorporation	Former Placenames and Boundary Changes
Rockingham County					
Atkinson	1642	1728	1767	1767	Part of Plaistow until 1767. Part to Hampstead in 1859.
Auburn	1744	1734	1845	1845	Part of Chester until 1845.
Brentwood	See Exeter	1748	1744	1744	Part of Exeter until 1742. Part became Fremont (then "Poplin") in 1764.
Candia	1720	1738	1763	1763	Part of Chester (known as "Charmingfare") until 1763. Candia-Chester and Candia-Raymond boundaries set in 1848.
Chester	1722	1756	1722	1722	Parts became Candia in 1763. Raymond in 1764. Hooksett in 1822, and Auburn in 1845.
Danville	1722	1738	1760	1760	Known as "Hawke" until 1836. Part of Kingston until 1760. Parts of Fremont annexed in 1783 and of Hampstead (then "Poplin") in 1877.
Deerfield	1722	1738	1766	1766	Part of Nottingham until 1766.
Derry	See Londonderry	1738	1738	1738	Part of Londonderry until 1827.
East Kingston	See Kingston	1738	1738	1738	Part of Kingston until 1738. Boundaries set in 1740 and reset in 1798. Parts to South Hampton in 1824, and Newton in 1845.
Epping	See Exeter	1741	1741	1741	Part of Exeter until 1741. Epping-Lee boundary set in 1818.
Exeter	1638	1638	1741	1741	Parts became Newmarket in 1727, Brentwood in 1742, and Epping in 1741.
Fremont	See Brentwood	1741	1741	1741	Known as "Poplin" until 1834. Part of Brentwood until 1764. Southern part to Danville in 1783.
Greenland	See Portsmouth	1704	1704	1704	Part of Portsmouth until 1704. Parts of Portsmouth annexed in 1721, and of Stratham in 1805 and 1847.
Hampstead	1728	1728	1749	1749	Boundaries established in 1859 and 1860.
Hampton	1635	1638	1639	1639	Part of Haverhill, Mass. known as "Timberlane" until 1749. Part of Atkinson annexed in 1859. Part to Danville in 1877.
Hampton Falls	See Hampton	1726	1726	1726	Part became Kingston in 1694. Hampton Falls in 1718. North Hampton in 1738, and Newton in 1749.
Kensington	1694	1638	1737	1737	Part of Hampton until 1718. Part of South Hampton annexed in 1742. Parts became Kensington in 1737, and Seabrook in 1768 and 1816.
Kingston	1722	1713	1738	1738	Part of Hampton Falls until 1737.
Londonderry	1722	1719	1740	1740	Part of Hampton until 1694. Parts became East Kingston in 1738, Sandown in 1756, and Danville in 1760.
New Castle	1693	1623	1693	1693	An additional part went to Plaistow in 1831.
Newfields	1693	1623	1693	1693	Parts became Windham in 1741, and Derry in 1827. Additional parts went to Wintham in 1777, 1778 and 1805, to Manchester (then "Derryfield") in 1751 and to Hudson in 1778.
Newington	1670	1670	1764	1764	Part of Portsmouth until 1693. Parts to Rye in 1726 and 1791.
Newmarket	1670	1670	1727	1727	Part of Newmarket until 1693. Parts to Rye in 1726 and 1791.
Newton	1720	1720	1749	1749	Part to Newmarket in 1852 of which a part was reannexed in 1883.
North Hampton	1720	1720	1749	1749	Part of Dover ("Bloody Point") until 1713. Part to Portsmouth in 1821.
Northwood	1720	1720	1749	1749	Part of Exeter until 1727. Boundaries changed in 1805, 1807, and 1818. Part became Newfields ("South Newmarket") in 1849. Parts of Newfields annexed in 1852, and a part returned in 1883. Part of Durham annexed in 1870.
Nottingham	1720	1720	1749	1749	Known as "Newtown" until 1846. Part of Hampton until 1749. Part of South Hampton annexed in 1749, and Newton-South Hampton boundary set in 1742. Part of East Kingston annexed in 1845.
Plaistow	1720	1720	1749	1749	Part of Hampton until 1749. Part of East Kingston annexed in 1845.
Portsmouth	1720	1720	1749	1749	Part of Hampton until 1749. Part of East Kingston annexed in 1845.
Raymond	1720	1720	1749	1749	Part of Hampton until 1749. Part of East Kingston annexed in 1845.
Rye	1720	1720	1749	1749	Part of Hampton until 1749. Part of East Kingston annexed in 1845.
Salem	1720	1720	1749	1749	Part of Hampton until 1749. Part of East Kingston annexed in 1845.
Sandown	1720	1720	1749	1749	Part of Hampton until 1749. Part of East Kingston annexed in 1845.
Seabrook	1720	1720	1749	1749	Part of Hampton until 1749. Part of East Kingston annexed in 1845.
South Hampton	1720	1720	1749	1749	Part of Hampton until 1749. Part of East Kingston annexed in 1845.
Stratham	1629	1693	1715	1715	Part of Squamscott Patent ("Winnicott") until 1715. Parts to Greenland in 1805 and 1847. Stratham-Newmarket boundary changed in 1805, 1867, and 1818.
Windham	1662	1720	1741	1741	Part of Londonderry until 1741. Part to Salem in 1752. Parts of Londonderry annexed in 1777, 1778, and 1805.

ROCKINGHAM

Town		Date of Grant	Date of Settlement	Date of Incorporation	Former Placenames and Boundary Changes
Strafford County					
Barrington	1722	1732	1742	1742	Strafford set off in 1820. Part of Rochester annexed in 1846.
Dover	1722	1623	1855	1855	Parts became Newington in 1713, Somersworth in 1729, Durham in 1732, and Madbury in 1755. Part of Rollinsford annexed in 1879.
Durham	1722	1623	1732	1732	Part of Dover ("Oyster River") until 1732. Parts became Madbury in 1755, and Lee in 1766. Durham-Newmarket boundary set in 1818, but an additional part went to Newmarket in 1870.
Farmington	1722	1770	1798	1798	Part of Rochester until 1798.
Lee	1722	1666	1766	1766	Part of Durham until 1766. Durham-Lee and Epping-Lee boundary set in 1818.
Madbury	1722	1666	1766	1766	Part of Durham until 1766. Durham-Lee and Epping-Lee boundary set in 1818.
Middleton	1722	1666	1766	1766	Part of Durham until 1766. Durham-Lee and Epping-Lee boundary set in 1818.
Milton	1722	1666	1766	1766	Part of Durham until 1766. Durham-Lee and Epping-Lee boundary set in 1818.
New Durham	1722	1666	1766	1766	Part of Durham until 1766. Durham-Lee and Epping-Lee boundary set in 1818.
Rochester	1722	1666	1766	1766	Part of Durham until 1766. Durham-Lee and Epping-Lee boundary set in 1818.
Rollinsford	1722	1666	1766	1766	Part of Durham until 1766. Durham-Lee and Epping-Lee boundary set in 1818.
Somersworth	1722	1666	1766	1766	Part of Durham until 1766. Durham-Lee and Epping-Lee boundary set in 1818.
Strafford	1722	1666	1766	1766	Part of Durham until 1766. Durham-Lee and Epping-Lee boundary set in 1818.
Sullivan County	1722	1666	1766	1766	Part of Durham until 1766. Durham-Lee and Epping-Lee boundary set in 1818.
Acworth	1722	1666	1766	1766	Part of Durham until 1766. Durham-Lee and Epping-Lee boundary set in 1818.
Charlestown	1722	1666	1766	1766	Part of Durham until 1766. Durham-Lee and Epping-Lee boundary set in 1818.
Clarendon	1722	1666	1766	1766	Part of Durham until 1766. Durham-Lee and Epping-Lee boundary set in 1818.
Cornish	1722	1666	1766	1766	Part of Durham until 1766. Durham-Lee and Epping-Lee boundary set in 1818.
Croydon	1722	1666	1766	1766	Part of Durham until 1766. Durham-Lee and Epping-Lee boundary set in 1818.
Goshen	1722	1666	1766	1766	Part of Durham until 1766. Durham-Lee and Epping-Lee boundary set in 1818.
Grantham	1722	1666	1766	1766	Part of Durham until 1766. Durham-Lee and Epping-Lee boundary set in 1818.
Langdon	1722	1666	1766	1766	Part of Durham until 1766. Durham-Lee and Epping-Lee boundary set in 1818.
Lempster	1722	1666	1766	1766	Part of Durham until 1766. Durham-Lee and Epping-Lee boundary set in 1818.
Newport	1722	1666	1766	1766	Part of Durham until 1766. Durham-Lee and Epping-Lee boundary set in 1818.
Piscataqua	1722	1666	1766	1766	Part of Durham until 1766. Durham-Lee and Epping-Lee boundary set in 1818.
Springfield	1722	1666	1766	1766	Part of Durham until 1766. Durham-Lee and Epping-Lee boundary set in 1818.
Sunapee	1722	1666	1766	1766	Part of Durham until 1766. Durham-Lee and Epping-Lee boundary set in 1818.
Unity	1722	1666	1766	1766	Part of Durham until 1766. Durham-Lee and Epping-Lee boundary set in 1818.
Washington	1722	1666	1766	1766	Part of Durham until 1766. Durham-Lee and Epping-Lee boundary set in 1818.

STRAFFORD

SULLIVAN



X. Appendix (continued)

D. Directory of County Registries

County	County Seat	Registry Hours Monday - Friday	
		Deeds	Probate
Belknap	Laconia	9:00 - 4:00	9:00 - 4:00
Carroll	Ossipee	9:00 - 12:00 1:00 - 5:00	9:00 - 12:00 1:30 - 5:00
Cheshire	Keene	9:00 - 12:30 1:30 - 5:00	9:00 - 12:30 1:30 - 5:00
Coos	Lancaster	8:30 - 12:00 1:00 - 4:00*	9:00 - 12:00* 1:30 - 5:00
Grafton	Woodsville	8:30 - 4:00*	8:30 - 12:00 1:00 - 4:00
Hillsborough	Nashua	8:30 - 5:00	9:00 - 5:00
Merrimack	Concord	9:00 - 5:00	9:00 - 5:00
Rockingham	Exeter	9:00 - 4:00*	9:00 - 4:00
Strafford	Dover	8:30 - 5:00*	8:30 - 12:00 1:30 - 5:00
Sullivan	Newport	8:30 - 12:00* 1:00 - 5:00	9:00 - 12:00* 1:00 - 5:00

\* Contact the Register for special appointments outside the listed hours.

All Registries are closed on Saturdays, legal holidays and election days.

Registry plan sizes: (suggested standards - 11" x 17" & 22" x 34")

County	Small	Large
Belknap	8½" x 11"	17" x 28" & 33" x 28"
Carroll	9" x 12"	19½" x 28½"
Cheshire		19" x 28½"
Coos		11½" x 18"
Grafton		10" x 18"
Hillsborough		24" x 36"
Merrimack	8½" x 11"	26" x 40"
Rockingham		18" x 30"
Strafford	8½" x 14½"	32" x 40"
Sullivan	17" x 22"	24" x 36"

X. Appendix (continued)

E. Suggested Boundary Line Agreement form for Lawyer's Use.

This agreement made this....day of.....19...between.....of..... and.....of.....said.....is owner of land situated in the Town of.....in the County of.....and the State of New Hampshire, said land is most recently described in a.....Deed dated .....and recorded in the .....County Registry of Deeds vol. ... pg. ...; said.....is owner of adjoining land which is most recently described in a.....Deed dated.....and recorded in the ..... County Registry of Deeds vol.....pg. ....;

the exact location of the division line between the lands described in these two deeds is uncertain,

the parties to this agreement desire to establish said line by this agreement as provided in the New Hampshire Revised Statutes Annotated ch. 472, sec. 1 -4; they have had said line surveyed and monumented as required by law,

the parties agree that said formerly uncertain division line between their lands is and shall be located according to the following description.....;

said described line is shown in detail on the recorded plan..... CR Plan No....., said plan was prepared by..... in accordance with this agreement.

In witness whereof we have set our hands and seals to this instrument in duplicate originals, on the day and year first above written.

Signed, sealed and delivered in the presence of

.....

The State of New Hampshire  
SS.

A. D. 19\_\_

Then personally appeared.....and acknowledged the foregoing instrument to be .....voluntary act and deed.  
Before me:

.....  
Notary Public



X. Appendix (continued)

F. One wording for a surveyor's certificate when all Title Insurance Standards have been met:

To all parties interested in title to the premises shown on this drawing I certify that it is a plan of a closed traverse transit and tape survey made under my supervision by.....at this site on ....., that it conforms to Title Insurance Standards, is correct, shows all known physical evidence and related recorded descriptions pertinent to title and to the best of my knowledge and belief there are no easements or encroachments other than shown.

G. Suggested paragraph for deeds and conveyances subject to a future survey:

The grantor and grantee agree that the above description will be redrawn and a corrective deed given in accordance with a survey which the grantee is having made and which will more particularly and definitely describe the premises conveyed.

X. Appendix (continued)  
H. Rod Conversion Table

Rods	0	1	2	3	4	5	6	7	8	9
0.	Feet	16.5	33.	49.5	66.	82.5	99.	115.5	132.	148.5
10.	165.	181.5	198.	214.5	231.	247.5	264.	280.5	297.	313.5
20.	330.	346.5	363.	379.5	396.	412.5	429.	445.5	462.	478.5
30.	495.	511.5	528.	544.5	561.	577.5	594.	610.5	627.	643.5
40.	660.	676.5	693.	709.5	726.	742.5	759.	775.5	792.	808.5
50.	825.	841.5	858.	874.5	891.	907.5	924.	940.5	957.	973.5
60.	990.	1,006.5	1,023.	1,039.5	1,056.	1,072.5	1,089.	1,105.5	1,122.	1,138.5
70.	1,155.	1,171.5	1,188.	1,204.5	1,221.	1,237.5	1,254.	1,270.5	1,287.	1,303.5
80.	1,320.	1,336.5	1,353.	1,369.5	1,386.	1,402.5	1,419.	1,435.5	1,452.	1,468.5
90.	1,485.	1,501.5	1,518.	1,534.5	1,551.	1,567.5	1,584.	1,600.5	1,617.	1,633.5
100.	1,650.	1,666.5	1,683.	1,699.5	1,716.	1,732.5	1,749.	1,765.5	1,782.	1,798.5
110.	1,815.	1,831.5	1,848.	1,864.5	1,881.	1,897.5	1,914.	1,930.5	1,947.	1,963.5
120.	1,980.	1,996.5	2,013.	2,029.5	2,046.	2,062.5	2,079.	2,095.5	2,112.	2,128.5
130.	2,145.	2,161.5	2,178.	2,194.5	2,211.	2,227.5	2,244.	2,260.5	2,277.	2,293.5
140.	2,310.	2,326.5	2,343.	2,359.5	2,376.	2,392.5	2,409.	2,425.5	2,442.	2,458.5
150.	2,475.	2,491.5	2,508.	2,524.5	2,541.	2,557.5	2,574.	2,590.5	2,607.	2,623.5
160.	2,640.	2,656.5	2,673.	2,689.5	2,706.	2,722.5	2,739.	2,755.5	2,772.	2,788.5
170.	2,805.	2,821.5	2,838.	2,854.5	2,871.	2,887.5	2,904.	2,920.5	2,937.	2,953.5
180.	2,970.	2,986.5	3,003.	3,019.5	3,036.	3,052.5	3,069.	3,085.5	3,102.	3,118.5
190.	3,135.	3,151.5	3,168.	3,184.5	3,201.	3,217.5	3,234.	3,250.5	3,267.	3,283.5
200.	3,300.	3,316.5	3,333.	3,349.5	3,366.	3,382.5	3,399.	3,415.5	3,432.	3,448.5
210.	3,465.	3,481.5	3,498.	3,514.5	3,531.	3,547.5	3,564.	3,580.5	3,597.	3,613.5
220.	3,630.	3,646.5	3,663.	3,679.5	3,696.	3,712.5	3,729.	3,745.5	3,762.	3,778.5
230.	3,795.	3,811.5	3,828.	3,844.5	3,861.	3,877.5	3,894.	3,910.5	3,927.	3,943.5
240.	3,960.	3,976.5	3,993.	4,009.5	4,026.	4,042.5	4,059.	4,075.5	4,092.	4,108.5
250.	4,125.	4,141.5	4,158.	4,174.5	4,191.	4,207.5	4,224.	4,240.5	4,257.	4,273.5

Links	0	1	2	3	4	5	6	7	8	9
0.	Feet	0.66	1.32	1.98	2.64	3.30	3.96	4.62	5.28	5.94
10.	6.60	7.26	7.92	8.58	9.24	9.90	10.56	11.22	11.88	12.54
20.	13.20	13.86	14.52	15.18	15.84	16.50				

1 sq. Rod = 272.25 sq. ft.

1 Acre = 208.71 ft. sq.

1 sq. Mile = 640 Acres

1 sq. Rod = 40 sq. rods

1 Rod = 1 pole

1 sq. Rod = 0.00625 Acres

1 sq. rods = 208.71 sq. ft.

102,400 sq. rods = 10,890 sq. ft.

1 perch = 16.50 sq. ft.



X. Appendix (continued)

I. Reference material.

1. Secretary of State's office, Concord, New Hampshire
  - a. Legislative Acts and Records. \*
  - b. N.H. Manual for the General Court (Red Book) \*
  - c. Town Maps 1803 - 1806.
  - d. Railroad Commission maps and files.
2. N.H. State Office of Planning and Research, Concord, N.H.
  - a. Population of New Hampshire, part one, 1946. \*
  - b. N.H. Municipal and County Officials, annual. \*
  - c. Communities and Settlements in N.H., 1937, op \*
  - d. Water Bodies in N.H., 1934. \*
  - e. Mileages between Cities and Towns in N.H., 1934 op \*
  - f. Base maps of state and town outlines.
  - g. Originals of some town assessors maps.
  - h. Aerial photos and indexes.
3. N.H. State Department of Public Works and Highways Right-of-Way Division, Concord, New Hampshire
  - a. Proprietors Plans.
  - b. Old town maps.
  - c. Detailed record of road right-of-way widths.
  - d. Property records, lines crossing state highways.
  - e. Aerial photos and indexes.
4. N.H. Water Resources Board  
Files on water bodies and water line changes.
5. N.H. Fish & Game Department, has old maps
6. N.H. State Library, Concord, New Hampshire
  - a. Microfilms of old records.
  - b. Copies of the publications marked above by \*.
  - c. Town Records before 1825.

X. Appendix (continued)

I. Reference material (continued)

7. County Courts, Clerks of = records old roads and turnpikes.
8. County offices of U.S Soil Conservation Service. Aerial photos.
9. New Hampshire Historial Society, Concord, N.H.
  - a. Provincial Records; original bound pen and ink record.
  - b. Proprietors' original record books.
  - c. Proprietors Plans; originals, copies and index to known copies wherever they may be.
  - d. Town, highway, fence viewer records; originals.
  - e. Provincial, State, Town Papers; printed and bound as authorized by the State Legislature. \*
  - f. Town Histories, frequently with maps.\*
  - g. Samuel Holland map of N.H. 1784.\*
  - h. Carrigain map of N.H. 1816; original pen and ink and subsequent printings of many variations.\*
  - i. H.F. Wallace County maps 1858.\*
  - j. Hurd's Atlas of N.H., 1892, detailed maps with houses and private owners' names.

\* = items of general distribution found in the State Library, Town libraries, local lawyer's and real estate dealers offices.

op = out of print.
10. N. H. Archives, 71 South Fruit Street, Concord, N.H., many of the oldest records listed above have been recently transferred to the Archives.



# STATE OF NEW HAMPSHIRE STATE PLANNING PROJECT PUBLICATIONS

Report No. 1  
Baker River Watershed  
Development Potential

Report No. 2  
Forest Management for Better  
Living in New Hampshire

Report No. 3  
Population of New Hampshire

Report No. 4  
New Hampshire Water Bodies  
and Public Access Points

Report No. 5  
Travel Habits in New  
Hampshire: Summer

Report No. 6  
A Continued Study of The Skier  
Market in Northeast North America

Report No. 7  
The Privately-Owned Camp-  
grounds of New Hampshire

Report No. 8  
Travel Habits in New  
Hampshire: Winter

Report No. 9  
The Economic Impact of Recreation,  
Vacation and Travel on New Hampshire

Report No. 10  
The Water Resources of  
New Hampshire